



GAIL FARBER, Director

# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

*"To Enrich Lives Through Effective and Caring Service"*

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ALHAMBRA, CALIFORNIA 91802-1460

March 12, 2009

IN REPLY PLEASE

REFER TO FILE: **WW-0**  
**A2874-7**

TO: Each Supervisor

FROM: Gail Farber  
Director of Public Works

A handwritten signature in cursive script, reading "Gail Farber", is written over the printed name and title.

### **BOARD MOTION OF AUGUST 5, 2008, AGENDA ITEM 17 MONTHLY REPORT ON PROGRESS OF WATER CONSERVATION EFFORTS**

On August 5, 2008, your Board directed the Acting Director of the Department of Public Works (Public Works) to report monthly on the progress of the County's multidepartmental water conservation efforts. The following is the seventh monthly report that summarizes the progress of a collaborative effort to implement the water conservation and drought response actions approved by your Board on July 1, 2008

#### **Action No. 1 (100 percent complete)**

*Declare a Countywide Water Supply and Conservation Alert.*

On August 5, 2008, your Board adopted a resolution declaring a Countywide Water Supply and Conservation Alert urging County residents, businesses, local water purveyors, and cities to intensify water conservation efforts. A letter was sent to all 88 cities in the Los Angeles County on October 20, 2008, to inform them of the Alert and request their support to intensify water conservation efforts.

#### **Action No. 2 (100 percent complete pending adoption by your Board)**

*Update and adopt a water wasting ordinance for unincorporated County areas and the Waterworks Districts' Phased Water Conservation Plan.*

A water wasting ordinance was approved by your Board on October 7, 2008. The ordinance established water conservation and waste prevention measures for unincorporated County areas. A letter was sent on December 30, 2008, to all water companies serving unincorporated County area residents to request that they inform their customers of the ordinance and encourage their customers' voluntary compliance with the ordinance's provisions.

Each Supervisor  
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In addition, the updated Phased Water Conservation Plan (Plan) for the Los Angeles County Waterworks District Nos. 21, Kagel Canyon, 29, Malibu, and the Marina del Rey Water System; 37, Acton, and 40, Antelope Valley was approved by your Board on March 3, 2009. The updated Plan for the Los Angeles County Waterworks District No. 36, Val Verde, is expected to be submitted for your Board's consideration in late May

**Action No. 3 (100 percent complete)**

*Direct all County departments to evaluate water usage, immediately implement conservation measures to reduce consumption by a target amount of 10 percent by December 31, 2008, and report back to your Board with recommended measures to reduce consumption by an additional 10 percent.*

The Internal Services Department (ISD), Public Works, and the Department of Parks and Recreation (DPR) completed their water utility bill analysis and determined that recent conservation efforts have reduced Countywide water usage by 9.5 percent for the period of July 1, 2008, to December 31, 2008, as compared to the same period in 2006.

Public Works reduced its water usage by 22.2 percent with significant water savings achieved by retrofitting the cooling water system and installing weather-based irrigation controllers at its Alhambra Headquarters. DPR reduced its water usage by 9.0 percent through installation of weather-based irrigation controllers, waterless urinals, and drought-tolerant plants at 71 parks. Additionally, ISD achieved a water use reduction of 8.9 percent at ISD-managed facilities by educating facility managers and disseminating information on available water conservation rebate and incentive programs.

Attached is a report providing additional information on the water use reductions and conservation measures to reduce consumption by an additional 10 percent.

**Action No. 4 (100 percent complete)**

*Send a five-signature letter to the Governor and leadership of the Legislature urging the State to expedite the award of bond funds from Propositions 84 and 1E to local agencies, including the County of Los Angeles.*

A five-signature letter was sent to the Governor and leadership of the Legislature on July 7, 2008

**Action No. 5 (100 percent complete)**

*Send a five-signature letter to the Governor and leadership of the Legislature expressing support for the Governor's Delta Vision, which provides a comprehensive, sustainable management plan for the Delta that includes conveyance, expanded storage, ecosystem restoration, and conservation.*

A five-signature letter was sent to the Governor and leadership of the Legislature on September 12, 2008.

**Action No. 6 (100 percent complete)**

*Direct the Chief Executive Officer (CEO) through the Office of Recycled Water and the Energy and Environmental Policy Team in collaboration with ISD, Public Works, DPR, Fire, Sheriff, and other appropriate departments to develop a recycled, nonpotable water infrastructure plan for County facilities; the planning process to include consultation with appropriate water purveyors and waste water treatment agencies. The recycled water infrastructure plan should establish priorities based upon amount of potable water saved and include a funding analysis and recommendations.*

The Recycled Water Infrastructure Implementation Committee submitted its final report to your Board on February 3, 2009.

**Action No. 7 (30 percent complete)**

*Direct the CEO, working with the Energy and Environmental Policy Team and with input from water conservation specialists to ensure utilization of Best Management Practices, including Leadership in Energy and Environmental Design and Low Impact Development, to develop a water conservation policy applicable to retrofit, refurbishment, and new construction of County facilities and grounds.*

The CEO, Public Works, DPR, and ISD are collaboratively preparing a checklist of Best Management Practices, including Leadership in Energy and Environmental Design and Low Impact Development that will be used to ensure that appropriate water conservation practices are incorporated in projects for the retrofit, refurbishment, and new construction of County facilities and grounds.

**Action No. 8 (100 percent complete)**

*Instruct the Director of Public Works and the Director of Planning to consult with the various water agencies that provide water services to County unincorporated areas, and report back to your Board in 30 days requesting information on how the drought may impact the land development review process for both discretionary and ministerial applications, and what your Board can expect regarding future actions by water agencies on pending development projects in the unincorporated area.*

Public Works and DPR sent a Drought Impact Questionnaire to unincorporated County area retail water purveyors requesting information on how the drought may impact the land development review process. A report summarizing the responses to the Questionnaire was completed on October 9, 2008, and sent to all Board offices.

Updates on these Action Items are also available on the Countywide Energy and Environmental website at <http://www.green.lacounty.gov>, which will be updated regularly

If you have any questions regarding this matter, please call me or your staff may contact Adam Ariki at (626) 300-3300

DWP:dvt

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Attach.

cc. Executive Office, Board of Supervisors  
County Counsel  
Sheriff  
Chief Executive Office (William T Fujioka, Lari Sheehan)  
Fire Department  
Internal Services Department  
Department of Beaches and Harbors  
Department of Parks and Recreation  
Department of Public Health  
Department of Regional Planning

## **WATER CONSERVATION MEASURES BY COUNTY DEPARTMENTS**

On August 5, 2008, your Board adopted a Resolution declaring a Countywide Water Supply and Conservation Alert and directing all County departments to evaluate water usage, immediately implement conservation measures to reduce consumption by a target amount of 10 percent by December 31, 2008, and report back to your Board with recommended measures to reduce consumption by an additional 10 percent.

Following is a summary of the multidepartmental effort to accomplish this goal.

### **Results of Water Conservation Measures Already Implemented**

The Department of Public Works (Public Works), the Internal Services Department (ISD), and the Department of Parks and Recreation (DPR) completed their water utility bill analysis for the period of July 1, 2008, through December 31, 2008, to quantify the impact of recent conservation efforts to reduce Countywide water usage. Due to normal billing cycles, the consumption results for the water accounts through December 31, 2008, were not available for reporting until recently. Similar updated reports will continue to be provided to your Board on a regular basis until the current drought ends. Separately, ISD has nearly completed formatting and archiving this data utilizing ISD's Enterprise Energy Management Information System (EEMIS) to track water costs and long-term consumption as is done now for electricity and natural gas. EEMIS will facilitate future tracking and reporting using water bill information from all County departments, allowing departmental facility managers to independently view their historic utility usage and costs at any time.

The County has nearly 1,600 separately metered water accounts from 120 different water purveyors. Public Works, ISD, and DPR receive the water bills for all County facilities. In tracking County water usage during the last half of 2008 representatives of the three departments met regularly to monitor and assess the County's conservation effort. A coordinated process was developed to compare recent water usage for higher volume accounts to the usage during the same period of a baseline year. Fiscal Year 2006-07 was selected as the baseline year for comparison purposes because water usage patterns at that time best represent conditions prior to the current drought.

In order for DPR to have comparable data to evaluate a reduction in water consumption, several facilities were excluded from this reporting period including.

- Park facilities that were under major construction and not operating at normal capacity
- Park facilities with new amenities and improvements that added new water usage after 2006
- New park facilities added to DPR's system after 2006 that were excluded because there was no comparison data.

In an aggressive measure to reduce potable water consumption, DPR has been developing and implementing new water conservation projects and initiatives, which include SMART Irrigation Controllers at 71 parks, waterless urinals, split water metering, and installation of drought-tolerant plant material.

DPR is also in the process of implementing the Phase I Recycled Water Master Plan, which includes providing recycled water to Victoria and Pathfinder Parks and Los Amigos and Alondra Golf Courses within the next year

In summary, water conservation efforts for Public Works, ISD, DPR, and the entire County for the period of July 1, 2008, through December 31, 2008, as compared to the same period in 2006 resulted in the following savings.

	Savings (%)
Department of Public Works	22.2
Internal Services Department	8.9
Department of Parks and Recreation	9.0
<b>Total for County</b>	<b>9.5</b>

#### **Additional Conservation Measures To Achieve Further Reductions**

To assist each department in meeting the recommended water demand reduction goals, ISD developed guidelines and conservation measures that were distributed to County facilities managers in September 2008. Attached are the individual behavior modification tips (Attachment A) and facility hardware changes (Attachments B and C) that will, when implemented, be instrumental in further reducing water demands.

Last year, ISD commissioned a water savings study that focused on water use for commercial building heating and cooling systems. Cooling water use constitutes a large portion of the water consumed at these facilities. Substantial water savings can be achieved by replacing older cooling water systems that require a continuous stream of water with newer systems that recirculate the cooling water. Such systems have been installed at the Civic Center Heating and Refrigeration Plant and Peter J. Pitchess Honor Rancho Power Plant, two of the County's largest cooling-water-use facilities, and at Public Works' Alhambra Headquarters. Initial results from testing at these facilities indicate that water savings of approximately 15 percent (30 million gallons) can be achieved annually. Additional systems are scheduled for installation at other selected sites in 2009.

The installation of cooling water recirculation systems currently represents the most economical and effective method to reduce water consumption at County facilities. As a result, ISD has requested \$500,000 in its Fiscal Year 2009-10 Energy Efficiency Projects budget request to install the systems at facilities throughout the County. In the event that the budget request is not approved, ISD plans to provide support to its

customer departments to fund implementation of the systems as part of their routine or extraordinary building maintenance budgets.

At the September 23, 2008, quarterly meeting of Countywide departmental facility managers, representatives from the City of Los Angeles Department of Water and Power and the Metropolitan Water District of Southern California gave presentations on their available water conservation rebate and incentive programs. County facilities may be eligible to receive rebates of 50 to 100 percent of equipment costs for the installation of water-saving devices. Rebate amounts and eligibility vary from area to area, so a check with the water supplier is necessary prior to the start of any modification. Facility managers from various departments have indicated that installations of water-saving devices in their facilities are proceeding

**10 EASY TIPS TO REDUCE WATER CONSUMPTION**

1. **Shorten your watering cycles.** Up to 70 percent of residential water use goes to maintaining our yards. Taking 1 minute off a 10-minute cycle saves 10 percent!
2. **Check your sprinkler system.** Do a weekly check for broken or clogged sprinkler heads and replace them right away. Make sure you are watering your yard and not the driveway or sidewalk.
3. **Fix those leaks.** Just a drip can waste more than 10,000 gallons per month. A leaking flapper on a toilet also increases flows at the water treatment plant.
4. **Plant native species or drought-tolerant plants.** Many of the lawns and plants we use are not intended for the unique climate in Southern California.
5. **Use a broom instead of a hose.** Sweeping up rather than hosing off leaves or grass clippings not only saves water, it reduces runoff.
6. **Get an adjustable hose nozzle for outdoor use.** With one of these you can adjust the spray to meet your needs. A hose running for 5 minutes uses the same amount of water as a 20-minute shower.
7. **Eliminate runoff.** Runoff could mean your lawn needs aeration. When you aerate your lawn, you give the water somewhere to go besides down the storm drain.
8. **Take shorter showers.** Cutting 2 minutes off your shower time can save 600 gallons a month for a family of 4. If you change the showerhead to a water-efficient model, you could save even more.
9. **Turn off the water** while you brush your teeth or shave.
10. **Wash only full loads of laundry or dishes.** Waiting until you have a full load can save you up to 20 gallons for the same amount of clean clothes.



## Internal Services Department Water Conservation Measures

Internal Services Department (ISD) provides in-house, contracted, and advisory services in the areas of alterations and improvements, facilities maintenance and operations, energy management, and custodial and grounds maintenance services. ISD operates building systems and provides maintenance and repair services to over 200 County facilities consisting of approximately 21,000,000 square feet.

**Current Water Conservation Measures** – The measures listed below are standard procedures currently used by ISD to ensure water conservation

- Monitor and maintain flush valves on existing toilets and urinals – Maintaining flush valves on a routine basis ensures that leaks are discovered quickly, thus reducing the amount of water wasted and ensure all valves operate properly
- Maintain aerators and flow restrictors on faucets – Repair or replacement of aerators and flow restrictors control the stream of water to prevent splashing and limit the amount of water used during hand washing.
- Monitor pumps and seals for leaks – Various types of pumps are used to provide domestic water to all plumbing fixtures and are used to circulate comfort heating and cooling water used for air conditioning. With proper maintenance, energy costs are reduced and leaks are repaired preventing wasted water and possible building damage.
- Service cooling towers to maintain maximum efficiency and float levels to prevent overflow – Cooling towers use water to transfer building heat to the atmosphere to maintain a comfortable environment of a building. They work similar to a car radiator
- Check water make-up meters on closed loop chilled and hot water systems for excessive water use – Make-up meters are used to measure the amount of water lost during equipment operation. Measuring the amount of water consumed can reveal hidden water leaks or equipment failure.

## **Current Water Conservation Measures Continued**

- Regular irrigation checks – Inspect irrigation system to ensure time clocks, control valves, and sprinkler heads are functioning properly for correct time of day and length of watering cycles for type of plants installed.
- Retro-commissioning buildings to provide more efficient air conditioning systems – Retro-commissioning is a systematic, documented process that identifies low-cost operational and maintenance improvements in existing buildings and brings the buildings systems that use heated and chilled water to optimal performance. Retro-commissioning typically focuses on energy-using equipment and optimizes existing system performance, rather than relying on major equipment replacement. It typically results in improved indoor air quality, comfort, controls, energy efficiency, and water conservation
- Continually monitor water bills – Check for unusual spikes in water consumption indicating possible leaks or problems. Coordinate with County departments to promote ways to conserve water and detect water leaks or excessive water consumption.
- Installing new water-saving devices – Installing waterless and low-flow fixtures when replacing existing fixtures significantly reduces the amount of water used.
- Landscape with drought-tolerant plants and vegetation – The installation of drought-tolerant plants at County facilities is used when replacement of plants is required
- Replace faucets with touch-less type when existing cannot be repaired – Touch-less type faucets limit the amount of water per use
- Install touch-less faucets and water-less urinals in all remodel projects.

**Proposed Conservation Measures** – Items proposed for future improvements in conservation measures.

- Investigate power plant modifications for use of recycled water in make-up water  
– Make-up water is used to cool the power plant's equipment.
- Partner with Public Works Wastewater Division and Sanitation Districts to develop a "retro-commissioning" program for water and wastewater systems.
- Complete Leadership in Energy and Environmental Design Existing Building (LEED EB) studies, which include water conservation measures.
- Upgrade urinals and toilets – Replace flush-type urinals with low-flow or waterless and replace high-consumption toilets with low-flow. By converting urinals to waterless and all toilets to low-flow in the Hall of Administration, the County will save approximately 378,840 gallons of water per month or more than 4.5 million gallons per year

### **WATER USE – SLOWING THE FLOW**

Most everyone who lives and works in Southern California is aware that we are having a dry spell again. California's extensive water supply infrastructure is designed to mitigate the effect of short-term dry periods for most water users. However, this year, California and the southwest is experiencing a supply shortage.

No one knows when this current drought will end. However, historically, droughts exceeding three years are relatively rare in Northern California, the source of much of the State's developed water supply.

Now, since the Governor has proclaimed a Statewide drought and the Los Angeles County Board of Supervisors has declared a Countywide Water Supply and Conservation alert, all County departments must pull together to reduce demands on our water reserves. The Board has directed each department to immediately implement conservation measures to reduce consumption by 10 percent by December 31, 2008, and recommend measures to reduce consumption by an additional 10 percent.

Since the first 10 percent reduction needs to take place this year, all departments must be proactive in their conservation efforts.

The following is a list of conservation measures each department can implement to initiate water savings at County facilities that will help in reaching the requested 20 percent savings target.

**No Cost/Low Cost.** Each department needs to educate staff to reduce water usage at facilities through an awareness campaign urging that, individually, we all can make a difference. Hardware changes such as low-flow shower heads and faucets, coupled with responsible-use habits, will lead to effective conservation and real water savings. Additionally, we can --

- Check facility for leaks and repair
- Encourage employees to conserve and to report water waste.
- Instruct landscape maintenance staff to reduce water use by repairing leaks, adjusting or replacing sprinkler heads to minimize overspray, adjust the sprinkler timer seasonally or replace timer with a smart controller
- Eliminate hosing down of walkways and driveways.
- Retrofit restrooms with self-closing faucets.
- Install water-saving faucet aerators in all restrooms.

**Low-flow faucets.** A standard lavatory sink faucet has a flow rate of 2.5-5 gallons per minute (gpm). Redesigned low-flow faucets have reduced this flow rate to 1.5-2.5 gpm while maintaining an adequate flow rate for hand washing. The design of the aerator installed in the outlet has made the faucets so successful. These aerators mix air into the water as it leaves the faucet, reducing both the flow and the amount of splashing, while increasing wetting efficiency

Savings.	40 percent
Cost:	Less than \$50/unit

**Low-flow shower heads.** These fixtures, similar to low-flow toilets, had to go through several design generations before they produced acceptable performance. Today's generation of low-flow showerheads have reduced flow rates, from as high as 7.5 gpm to less than 2.5 gpm. Since the units reduce the flow of hot water, they generate additional energy savings in water heating.

Savings:	50 percent or more
Cost:	Less than \$100/unit

**Low-flow urinals.** Urinals, like toilets, use large amounts of water. Before the advent of low-flow models, many urinals required 2-3 gallons of water per flush. Today's low-flow models all require less than 1 gallon per flush. Although designing a low-flow urinal did not present the same problems that manufacturers experienced with low-flow toilets, design changes were required in order to develop a unit that performed successfully. When coupled with a touchless, automatic control valve, water savings produced by low-flow urinals is even greater.

Savings.	50 to 70 percent
Cost:	Less than \$500/unit

**Low-flow toilets.** Toilets are the single largest users of water in many facilities. One flush of each standard toilet uses 3.5-5.5 gallons of water. By contrast, today's low-flow units require 1.5 gallons per flush.

Early generation units were plagued with operation and maintenance problems, giving low-flow units a bad reputation. Today's units have been completely reengineered for operation under low-flow conditions. Redesigned water inlets, traps, and directing jets eliminate the need to flush twice, a common complaint concerning the operation of early low-flow models.

Savings.	60 to 70 percent
Cost:	\$1,500/unit

**Touchless controls.** Touchless controls for restroom faucets have been widely promoted as a means of improving hygiene in restrooms. An infrared sensor

detects a user's hands under the faucet and turns on the water. Removing the hands turns off the water flow. Unlike timed and other automatic controls, touchless controls limit water flow. They also promote water conservation for toilets and urinals. By automatically flushing the units after use, automatic controls prevent users from overflushing.

Savings: 50 percent or more  
Cost: \$1,755/unit

**Waterless urinals.** The newest addition to water-conserving devices is the waterless urinal. Applicable to both new construction and retrofits, the units operate without water or a flush valve. To form a barrier that prevents odors from entering the restroom, the urinals use an internal trap filled with a liquid that is lighter than urine. In a typical application, this urinal can save up to 44,000 gallons of water annually

Savings: 100 percent  
Cost: \$2,580/unit

**Point-of-use water heaters.** Traditional building designs rely on a central water-heating system. A centrally located boiler generates hot water, which is distributed through insulated piping. Larger buildings use circulation pumps and large central storage tanks to improve system performance.

Systems designed to generate hot water at the point of use employ multiple, smaller water heaters located throughout a facility. Generating hot water at the point of use reduces distribution losses and, just as importantly, water requirements. When hot water is generated in a central system, even in circulating systems, water must be run for a few seconds before hot water is available to the user. Point-of-use water heaters eliminate this waste of water.

Savings: 50 percent or more  
Cost: Greater than \$2,500/unit

**Mechanical systems.** One area that managers too often overlook when implementing a water-conservation program is a building's mechanical systems. Building boilers and cooling towers have significant requirements for water use that managers must consider

Both boilers and cooling towers use automatic valves to maintain water levels to keep contaminants within acceptable concentrations and to make up for water lost from the system. Controls that operate properly minimize water use, but control valves that stick or otherwise fail to operate properly use large volumes of water in a very short period of time. Balancing water quality saves water and energy, optimizes the use of water-treatment chemicals, reduces air and

wastewater emissions, and extends equipment life. Rebates up to \$3,000 are available for installing cooling tower pH controllers.

Managers must ensure that technicians inspect all water-using mechanical systems daily to ensure their proper operation.

Savings:	Up to 40 percent or as much as 800,000 gallons
Cost:	ISD estimates available

### **Maintenance issues**

While water-conserving devices are low-maintenance items, they cannot simply be installed and forgotten. Technicians should check all units regularly and make periodic adjustments to flow-control devices.

Automatic flow controls require battery replacement every one to two years because dirt and contaminants in the water system can easily clog the small openings in flow-control devices.

Managers need to establish a schedule for inspecting and testing all water-conserving devices. By setting up the program as the devices are installed, managers can ensure that the program will achieve its greatest potential.

### **Utility Incentives and Other Support**

When evaluating the potential for water savings in any facility, remember that financial assistance or incentives are available from many utilities to encourage customer conservation. Attached are lists of the current cash rebates available for installing water saving technologies from the Los Angeles Department of Water and Power (LADWP) and the Metropolitan Water District of Southern California (MWD). Although there are usually labor costs for installation, faucet aerators and low-flow shower heads are available free from many water suppliers.

Saving water is more important than ever, and ISD wants to help the County in reaching its goal of 15 to 20 percent reduction in overall water demand. Should your department have any questions regarding any of the conservation measures mentioned, assistance evaluating incentive availability or help with installation, please contact ISD's Facilities Operations Service at (323) 267-2105. Also, go to [green.lacounty.gov](http://green.lacounty.gov), LA County's Energy and Environmental website for information on energy and water-efficiency policies and programs.

ISD will be monitoring County water usage and will report to the Board later this year on the savings achieved. Included in this report will be the steps being taken to reach the long-term goal of 15 percent to 20 percent reduction in water demand.

This drought will impact all of us so it is vitally important that we work together to minimize its impacts.



## Cash Rebates

for Commercial, Industrial and Institutional Water Customers of the MWD

### Plumbing Fixtures:

- Ultra Low Flush Toilets (1.6 gpf or less) ..... \$135  
(1.6 gpf replacing existing toilet or 3.5 gpf or more)
- High Efficiency Toilets (Dual Flush, or 1.28 gpf or less) ..... \$165  
(1.28 gpf or less replacing existing toilet of 3.5 gpf or more)
- High Efficiency Toilet Upgrade ..... \$30  
(three (3) gpf or less replacing toilet of 3.5 gpf to 1.28 gpf)
- Zero and Ultra Low Water Urinals ..... \$400  
(0.25 gpf or less replacing existing urinal of 3.5 gpf or more)
- Zero Water Urinal Upgrade/New Construction ..... \$120  
(0.25 gpf or less replacing existing urinal of 3.5 gpf)
- High-Efficiency Urinals ..... \$200  
(0.25 gpf or less replacing existing urinal of 3.5 gpf or more)
- High Efficiency Urinal Upgrade/New Construction ..... \$60  
(0.25 gpf or less replacing existing urinal of 3.5 gpf)

### Food Equipment:

- Pre-Rinse Spray Heads ..... \$60
- Connectionless Food Steamers ..... \$485  
per compartment

### HVAC Equipment:

- Cooling Tower Conductivity Controllers ..... \$625
- pH / Conductivity Controllers ..... \$1,900

### Medical Equipment:

- X-Ray Film Processor Recirc. System ..... \$3,120
- Steam Sterilizer Retrofits ..... \$1,900
- Dry-Vacuum Pumps ..... \$125  
per 0.5 HP

### Cleaning Equipment:

- High Efficiency Clothes Washers ..... \$210  
(Coin and card operated)
- Pressurized Waterbrooms ..... \$150

APPLICATION ENCLOSED

ATTACHMENT C-1

# It's Time to Get Serious About Saving Water

X-Ray Machines

Toilets

Waterbrooms

Urinals

Washers

pH Controller

Businesses account for about one-third of the water used in our community. Some businesses use water only for sanitary purposes, while others irrigate to maintain attractive landscapes. Many companies use large amounts of water in different ways to develop products and to provide services.

The Metropolitan Water District is committed to helping businesses use water more efficiently in their facilities and in their processes.

### Mail To:

Save Water - Save A Buck Rebate Program  
P.O. Box 786, El Segundo, CA 90245  
1-877-728-2282 or Fax to (310) 414-8820

Rebates vary by water agency and are subject to change. Rebate available to commercial customers served by the Metropolitan Water District's Family of Southern California Water Agencies.

For more information on our rebate program, log on to: [www.bewaterwise.com](http://www.bewaterwise.com)

Click the Save A Buck icon



SAVE WATER  
SAVE A BUCK

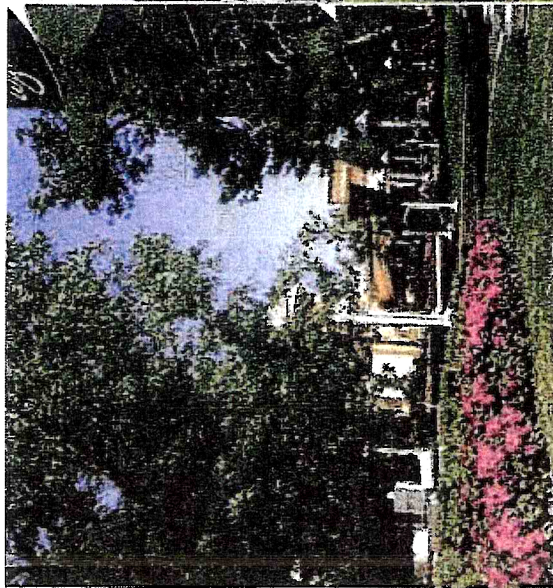
It's **EASY** to participate.  
**1-877-728-2282**

[www.bewaterwise.com](http://www.bewaterwise.com)

Commercial  
Rebate Program  
for  
Water Saving Devices

It's **EASY** to participate.  
**1-877-728-2282**





APPLICATION ENCLOSED

ATTACHMENT C-2

# It's Time to Get Serious About Saving Water

## Now is the time to consider replacing your grass with new Synthetic Turf.

A great alternative for both small and large landscapes, wherever grass is currently used, Synthetic Turf is becoming increasingly popular for sports fields, golf courses, parks and public spaces as well as many commercial uses.

The advantages of Synthetic Turf are wide-ranging. In addition to the minimal maintenance required, a Synthetic Turf surface:

- Requires no water
- Is aerthetically pleasing all the time—fresh cut appearance
- Needs no chemicals or fertilizer
- Never needs mowing or insecticides
- Can be cleaned—unlike mulch and shredded rubber
- Is safe—no more buried glass or other harmful objects

Over time, Synthetic Turf saves owners time, money, hassle and worry. Once installed, this synthetic surface continues to provide return on investment year after year all year long.

**Synthetic Turf**  
\$0.30 REBATE per square foot  
\$13,000 per acre  
no minimum - no maximum  
retrofit or new construction  
must replace irrigated area

### Mail To:

Save Water - Save A Buck Rebate Program  
P.O. Box 786, El Segundo, CA 90245

1-877-728-2282 or Fax to (310) 414-8820

Rebates vary by water agency and are subject to change. Rebate available to commercial customers served by the Metropolitan Water District's Family of Southern California Water Agencies. **Update**

For more information on our rebate program, log on to: [www.bewaterwise.com](http://www.bewaterwise.com) **1-877-728-2282**

Click the Save A Buck icon



It's **EASY** to participate. **1-877-728-2282**

[www.bewaterwise.com](http://www.bewaterwise.com)

Rebates on  
**Synthetic Turf** for  
Commercial Outdoor Landscaping

Save TIME, Save WATER,  
Save MONEY  
and Reduce Wasteful Run-Off!

It's **EASY** to participate.

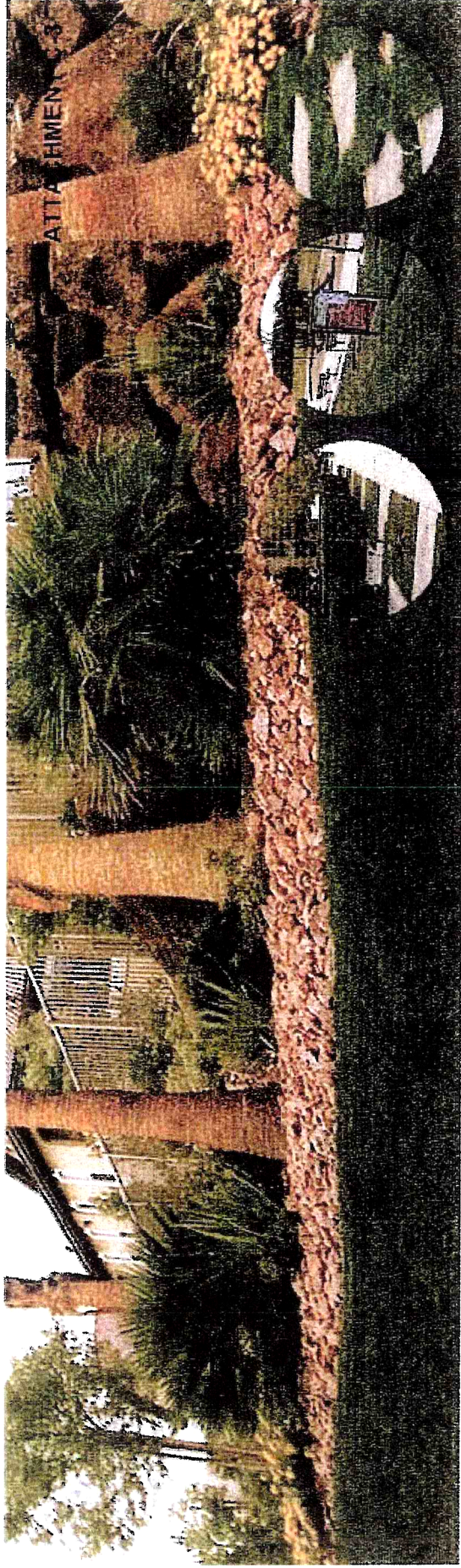
**1-877-728-2282**

[www.bewaterwise.com](http://www.bewaterwise.com)



**SAVE WATER  
SAVE A BUCK**





## ***The newest Synthetic Turf looks and feels great***

Today's Synthetic Turf systems are solid, reliable, durable and deliver the kind of form and function that can enhance any project. The look and feel, color and texture of some of the new generation of Synthetic Turf looks so close to real, that it has gained acceptance for a wide variety of applications.

## ***Synthetic Turf is ideal for many landscape uses***

Driven by need (low maintenance, drought tolerant, high traffic, water conserving), Synthetic Turf is now being adopted for use as more than a spot surface amenity—it has now become another landscape option for both small and large irrigated areas. The use of Synthetic Turf can also enhance and extend the livable area of residential and commercial properties.

## ***A GREEN solution for water conservation***

Synthetic Turf is the perfect solution for keeping landscapes green and saving water. Too, today's Synthetic Turf is specially designed for a variety of uses including residential and commercial landscaping. The newest Synthetic Turf features a softer, longer blade to create the look and feel of real grass.

As a result of low rain fall and limited water supplies, California businesses should reduce their water usage wherever possible. Conserving water is a major initiative to which everyone can contribute. So as well as providing an instant and constant green lawn during times of drought, Synthetic Turf can help save businesses thousands of dollars and save thousands of gallons of water as well.

Easy on the environment, easy on the eyes and easy underfoot, Synthetic Turf is the easy answer to keeping lawn areas green without water.

## ***Synthetic Turf applications are many...***

- Commercial Landscapes
- High Traffic Areas
- Playgrounds
- Commercial Common Areas
- Parks and Recreation
- Driving Ranges
- Roadways and Medians

## ***The Goal is to SAVE WATER!***

### **Synthetic Turf**

**\$0.30 REBATE per square foot**

**\$13,000 per acre**

no minimum - no maximum  
retrofit or new construction  
must replace irrigated area



# It's Time to Get Serious about Saving Water



## Conservation Rebates for Business & Multi-Family Customers

Description	Retrofit Rebate Amount	New Construction Rebate Amount
High Efficiency (1.28 gpf*) Toilet: replacing ULF** Toilet	\$50	\$50
High Efficiency Toilet: replacing non-ULF Toilet (≥3.5 gpf)	\$300	\$50
Ultra-Low-Flush** Toilet Commercial/Multifamily***	\$200/\$120*	\$0
High Efficiency (0.0-0.25 gpf) Urinal: retrofit replacing ≥1.5 gpf	\$500	
High Efficiency (0.0-0.25 gpf) Urinal: retrofit replacing <1.5 gpf	\$250	\$250
High Efficiency (0.26-0.50 gpf) Urinal: retrofit replacing ≥1.5 gpf	\$400	
High Efficiency (0.26-0.50 gpf) Urinal: retrofit replacing <1.5 gpf	\$200	\$200
Cooling Tower pH/Conductivity Controller	\$3,000	\$3,000
Cooling Tower Conductivity Controller	\$625	\$625
Steam Sterilizer Retrofit	\$2,300/Device	\$2,300/Device
Connectionless Food Steamer	\$600/Compartment	\$600/Compartment
X-Ray Processor Recirculating System	\$4,400	\$4,400
Dry Vacuum Pump (max 2.0 HP)	\$125/Horsepower	\$125/Horsepower
High Efficiency Commercial Clothes Washer (coin and card operated)	\$430	\$430
Large Rotary Nozzle Retrofit	\$13/head (8 head minimum)	\$13/head (8 head minimum)
Weather-Based Irrigation Controller	\$1,000/Acre	\$1,000/Acre
Rotating Sprinkler Nozzle for Irrigation	\$5/Nozzle (25 nozzle minimum)	\$5/Nozzle (25 nozzle minimum)
Pre-rinse self-closing spray head	\$60	\$60
Water Broom	\$150	\$150

Toilet & urinal installations require a L.A. Dept of Building & Safety permit. Call (888) 524-2845 for plumbing permit information

\*gpf - gallons per flush

\*\*ULF - Ultra Low Flush 1.6 gallons per flush

Call 877-728-2282 or [www.ladwp.com/cwr](http://www.ladwp.com/cwr)

\*\*\*Multi-family customers must install a SPS certified toilet. List can be found at <http://pld.lapmo.org/> (go to "VIEW LADWP LISTINGS")  
[www.mwdsavesbruck.com/rebates.htm](http://www.mwdsavesbruck.com/rebates.htm)

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